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# *Blotia leandriana* (Euphorbiaceae–Phyllanthoideae), a New Species from Eastern Madagascar

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**ABSTRACT.** *Blotia leandriana*, endemic to the eastern coastal forests of Madagascar, is described and contrasted with its congeners. It is most similar to *B. oblongifolia* (Baillon) Leandri but is distinguished by its smaller leaves and fruits, its inconspicuous secondary venation, and its shorter, unchanneled petioles.

***Blotia leandriana*** Petra Hoffmann & McPherson, sp. nov. TYPE: Madagascar. Toliara, Tolanaro (Fort Dauphin), NE of town in coastal forest called Mandena, roadside forest E of and beyond QIT camp, 25 m, 7 Dec. 1989, G. McPherson & N. Dumetz 14651 (holotype, MO; isotypes, B, DAV, K, P, TAN, TEF). Figure 1.

Species *Blotiae* characterum combinatione ab aliis speciebus generis distinguenda: a *B. bemarensi* Leandri foliis ellipticis nunquam ovatis, petalis distincte unguiculatis; a *B. hildebrandtii* (Baillon) Leandri foliis maioribus, petalis sepalis aequilongis, pedicellis florigeris et fructigeris longioribus; a *B. oblongifolia* (Baillon) Leandri foliis fructibusque minoribus, petiolis brevioribus teretibus non canaliculatis, venis secundariis in sicco tam prominentibus quam venibus tenuioribus; a *B. tanalorum* Leandri foliis plerumque coriaceis, floribus minoribus, apicibus sepalorum non incrassatis, petalis distincte unguiculatis differt.

Monoecious shrubs or small trees up to 8 m. Young twigs terete, glabrous, minutely puberulent or sparsely pubescent, glossy. Stipules linear, acute, 3–4 mm long, 0.5–1 mm wide, glabrous, very thin, red to black when dried, usually persistent. Petiole flat adaxially to terete, not canaliculate, 1–3 mm long, 0.7–1 mm wide, glabrous or more rarely puberulent. Leaf blades elliptic, (2–)3–6(–8) cm long, 1–3 cm wide; apex usually acuminate to an obtuse or broadly acute tip, sometimes obtuse; base acute to narrowly obtuse, not or only obscurely auriculate; margin plane to slightly revolute; glabrous, coriaceous or rarely chartaceous, light grayish green when dried, dull, the midvein prominent on both sides, secondaries 7–12 pairs below the acumen, not conspicuous compared with finer venation,

which is more prominent abaxially than adaxially. Inflorescences axillary (but reported also to be cauline), staminate and pistillate flowers together in fascicles of 5–20 borne directly in the leaf axils or on unbranched, usually leafless axes up to 1 cm long. Flowers ca. 2 mm long, 2–3 mm wide, pedicellate, bracteate; the pedicels terete, glabrous; the bracts 3 per flower, deltoid, acute, ca. 0.5 mm long, ca. 0.5 mm wide, glabrous except for ciliate margins. Buds globose. Staminate flowers on pedicels 10–15 mm long, ca. 0.2 mm wide. Sepals 5, oblong to obovate, apex rounded, not thickened, 1.5–2 mm long, 1–1.2 mm wide, entire, glabrous or sparsely pubescent on margins, coriaceous. Petals 5, spatulate, rounded, 1.2–1.5 mm long, 0.7–1 mm wide, extending to the same level as the sepals, often reflexed, distinctly clawed, erose. Disc episepalously lobed, lobes separate or connate at the base, 0.2–0.3 mm long, thick, glabrous. Stamens 5, ca. 1 mm long, fused at the base for  $\frac{1}{3}$  to  $\frac{1}{2}$  of their length, their free parts erect. Pistillode clavate to cylindrical, ca. 0.5 mm long, 0.2–0.3 mm wide, apex 3-lobed, lobes erect, terete to almost semi-globose, sometimes channeled inside, glabrous. Pistillate flowers on pedicels 10–20 mm long, ca. 0.3 mm wide. Sepals 5, oblong to obovate, apex rounded, not thickened, ca. 1.5 mm long, 1–1.5 mm wide, entire, glabrous or sparsely pubescent on margins. Petals 5, spatulate, rounded, 1–1.2 mm long, 0.7–1 mm wide, slightly shorter than the sepals, often reflexed, distinctly clawed, erose. Disc annular, episepalously lobed, margin erose, ca. 0.2 mm long, glabrous, thick. Ovary globose, ca. 1 mm long, glabrous. Styles 3, 2-fid to the base, their branches terete, ca. 0.3 mm long, ca. 0.1 mm wide, spreading, glabrous. Stigmas acute to truncate. Fruits solitary or in pairs, subglobose, shallowly 3-lobed, 6–9 mm long, 6–11 mm wide, glabrous, reticulate because of the prominent venation, light brown. Fruiting pedicels 10–25 mm long, 0.3–0.5 mm wide, glabrous. Columella 5–7 mm long, base and apex ca. 1 mm wide, thinner in the middle.

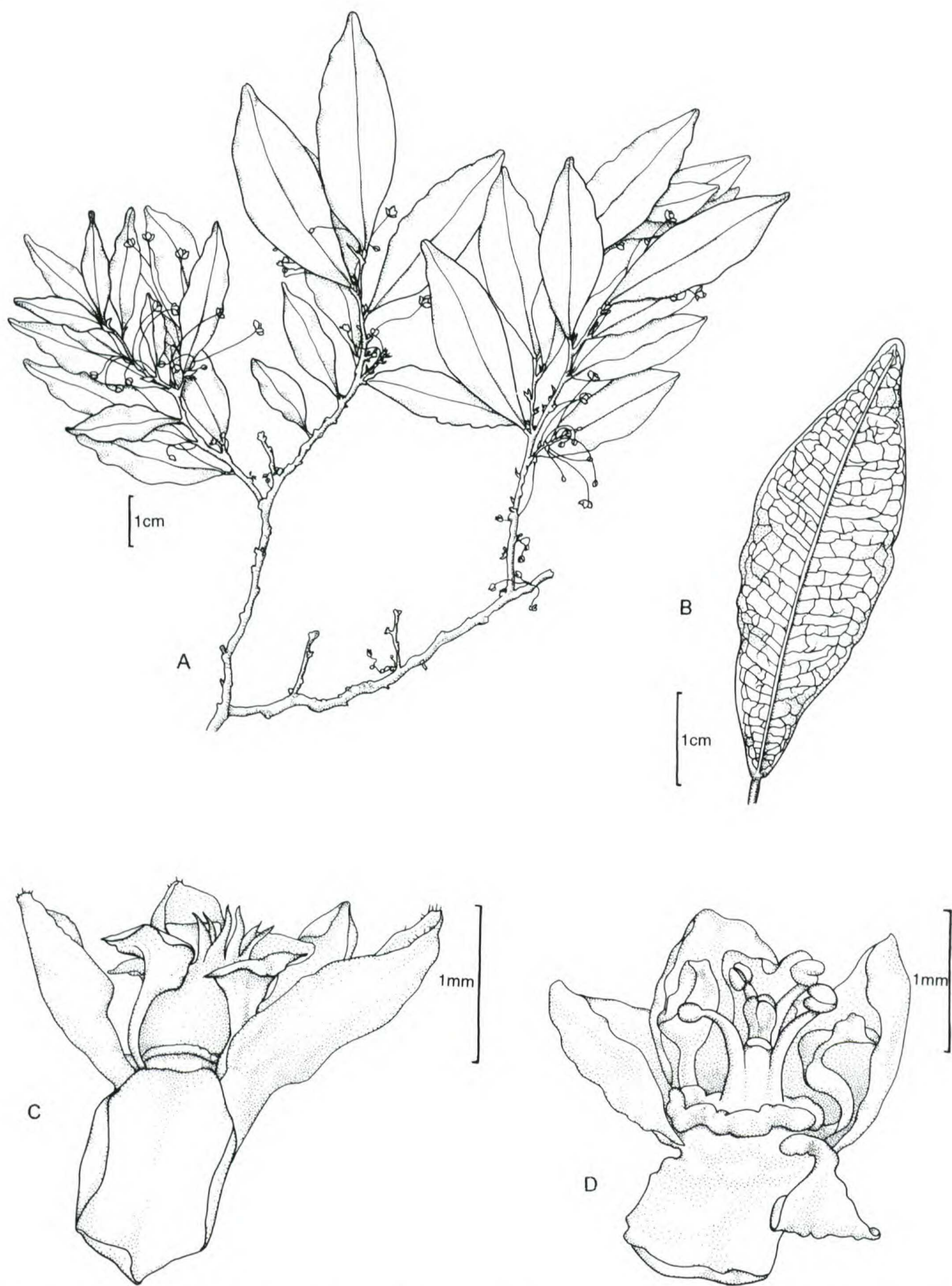


Figure 1. *Blotia leandriana* Petra Hoffmann & McPherson. —A. Habit. —B. Leaf. —C. Pistillate flower. —D. Staminate flower with one sepal, one petal, and part of one stamen removed.

Exocarp ca. 0.2 mm thick. Endocarp ca. 0.4 mm thick. Seeds 1–2 per locule, 5–7 mm long, 4–5 mm (1-seeded locules) or ca. 3 mm (2-seeded locules) wide, smooth, slightly shiny, light brown.

*Distribution and ecology.* East coast of Madagascar, between Vohimarina (Vohémar) and Tolanaro (Fort Dauphin), in coastal forest, usually on sand, at 10–150 m elevation.

*Key characters.* Petioles not channeled, leaves elliptic, 3–6 cm long, 1–3 cm wide, secondary veins about as prominent as finer venation, apices of sepals not thickened, petals distinctly clawed, extending to the same level as the sepals, fruiting pedicels up to 25 mm long, fruits not exceeding 9 × 11 mm in size.

The new species differs from *Blotia bemarensis* in having elliptic, never ovate, leaves and distinctly clawed petals; from *B. hildebrandtii* in having larger leaves, petals extending to the same level as the sepals, and longer flowering and fruiting pedicels; from *B. oblongifolia* in having smaller leaves and fruits, unchanneled petioles, and secondary veins scarcely more conspicuous than the finer venation; and from *B. tanalorum* in having mostly coriaceous leaves, smaller flowers, unthickened sepal apices, and distinctly clawed petals.

*Paratypes.* MADAGASCAR. 32 km au sud de Vohé-

mar, à l'ouest de la route, 50–150 m, forêt, 26 Sep. 1988, *Badré 2074* (P); Fort Dauphin, Mandena Campement, 7 Dec. 1989, *Dumetz & McPherson 1136* (MO, P, TAN, TEF); Tolanaro (Fort Dauphin) region, ca. 117 km N of city, ca. 7 km N of Manantenina, forest remnant called Analalava, 8 Nov. 1989, *McPherson 14407* (MO, P, TAN, TEF); N of Fort Dauphin (Tolanaro), Ste. Luce region, Manofiafy, 25 m, 19 Oct. 1989, *McPherson (et al.) 14158, 14170* (MO, P, TAN, TEF); Tolanaro (Fort Dauphin), Mandena (QIT-Fer), parcelle 4, 18 Apr. 1989, *Rabevohitra 1898* (MO, P, TAN, TEF); Tolanaro (Fort Dauphin), Mandena, 10 m, 13 Jan. 1990, *Rabevohitra 2125* (K, MO, P, TAN, TEF); Mandena, *Rajeriarison Euph 34* (P); Tamatave, Réserve Naturelle 1, 27 July 1950, *Rakotoniaina 2632-RN* (P); Farafangana, J.B. No. 16, Manombo, Canton Ihorombé, *Service des Eaux et Forêts 16270-SF* (P).

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